

**P2 E-News, Volume 2, Number 2
February 2007**

Welcome to P2 E-News!

In this issue of **P2 E-News** we include information on perchloroethylene use in dry cleaning, upcoming symposiums and workshops, the DTSC Metal Finishing Model Shop program, training opportunities, and more.

As always, please feel free to tell your friends and associates about **P2 E-News**! Anyone interested in receiving **P2 E-News** is welcome to subscribe using the DTSC Listserv webpage at <http://www.calepa.ca.gov/Listservs/dtsc/> (scroll down to DTSC **P2 E-News** and click on Subscribe).

Got ideas for future issues? Send your comments or suggestions on how we can better serve you to P2@dtsc.ca.gov, or call the Pollution Prevention Hotline at (800) 700-5854.

Pollution Prevention (P2) - Changing the way we think and act so we can reduce or eliminate the creation of waste and pollution.

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**Air Resources Board Votes to Ban Perc Use by Dry Cleaners**

It's official! On January 25, 2007, the California Air Resources Board (ARB) approved regulatory amendments that will phase out use of the solvent perchloroethylene (known as Perc) in the dry cleaning industry statewide. The amendments completely ban Perc use by California dry cleaners effective January 1, 2023.

Long used by the dry cleaning industry, Perc is now considered a toxic air contaminant in California and is known as a potential human carcinogen. The ARB Chairman, Dr. Robert Sawyer, was quoted as saying "We have safer alternatives to the Perc dry cleaning process, so the board chose to close the door on this method of cleaning clothes."

For more information on the ARB decision, please visit the ARB website at:  
<http://www.arb.ca.gov/newsrel/nr012607b.htm>.

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Perc Dry Cleaning Alternatives - Recent Reports by DTSC, ARB and USEPA

In evaluating Perc source reduction options and alternatives, DTSC, ARB, and the U.S. Environmental Protection Agency (USEPA) have published several technical assessments addressing dry cleaning technologies and solvent alternatives. Here's a short list of some of the recent reports that you can view online.

Spotting Chemicals: Alternatives to Perchloroethylene and Trichloroethylene in the Textile Cleaning Industry - 2007 (No Appendices)

Sponsored by DTSC and USEPA, this project was completed by the Institute for Research and Technical Assistance (IRTA), a non-profit pollution prevention organization located in Glendale, California. IRTA worked with seven textile cleaning facilities that have already adopted alternatives to Perc to further identify and develop safer spotting agents. Trichloroethylene (TCE) and Perc are currently used as spotting agents by the dry cleaning industry, but both of

these chemicals are considered carcinogens. Safer alternatives include water-based cleaners, soy-based cleaners, and acetone-based cleaners. A cost analysis done as part of the study indicates that the safer alternatives are actually less costly than the spotting agents used today.

This report is now available on the IRTA website at <http://www.irta.us/reports.htm>. The report will also be available on the DTSC website in March 2007.

***California Dry Cleaning Industry Technical Assessment Report, February 2006
State of California, Air Resources Board***

This report was prepared as part of the technical evaluation of the Airborne Toxic Control Measure for Emissions of Perchloroethylene from Dry Cleaning Operations (Dry Cleaning ATCM). The purpose of the assessment was to compare Perc dry cleaning to the available alternatives and determine whether the Dry Cleaning ATCM (originally adopted in 1993) continues to be adequately protective of public health.

The report is available on the ARB website at:
<http://www.arb.ca.gov/toxics/dryclean/finaldrycleantechreport.pdf>

Hydrocarbon Technology Alternatives to Perchloroethylene for Dry Cleaning - 2005 (No Appendices)

Sponsored by DTSC and performed by IRTA, this study analyzed the performance and cost of using the hydrocarbon process at seven dry cleaners. Cost comparison data for use of Perc and hydrocarbon dry cleaning were evaluated for five of the facilities. Results of the cost analysis indicate that the cost of using hydrocarbon is comparable to the cost of using Perc.

The report is currently available on the IRTA website at <http://www.irta.us/reports.htm>. The report will also be available on the DTSC website in March 2007.

Evaluation of New and Emerging Technologies for Textile Cleaning - 2005

ARB and USEPA sponsored this IRTA technology assessment of alternatives to Perc dry cleaning. Alternatives evaluated include hydrocarbon, Pure Dry, Green Earth, glycol ether, traditional wet cleaning, icy water, Green Jet and carbon dioxide. IRTA focused on 14 case studies of cleaners that had adopted the alternative technologies. Nine of these plants converted from Perc to the alternative and five started up using the alternative. Performance and cost for the alternatives were also evaluated and compared to costs prior to conversion.

This report is available on the DTSC website at:
http://www.dtsc.ca.gov/PollutionPrevention/upload/P2_REP_Emerging_Technology_Textile_Cleaning.pdf.

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**DTSC January REACH Seminars - Presentation Materials Available Online**

Last month DTSC sponsored two free seminars on the European Union's newly adopted chemicals policy program known as the Registration, Evaluation, and Authorization of Chemicals (REACH). Both seminars and all the speaker presentations were very informative and well received!

On January 26th, DTSC and the Office of Environmental Health Hazard Assessment (OEHHA) invited Dr. Richard A. Denison to present a talk titled "Moving Beyond 'No Evidence of Harm'

Chemicals Policies." Dr. Denison discussed his findings of a comparative study that looked at the United States' Toxic Substances Control Act (TSCA), the Canadian Environmental Protection Act (CEPA), and REACH.

DTSC also hosted a brown bag seminar on the REACH regulations on Wednesday, January 31. The seminar was led by DTSC's Chief Scientist, Dr. Jeffrey Wong, and Chief Legal Counsel, Elizabeth Yelland, and included presentations by Mr. Todd O. Maiden from Reed Smith law firm and Dr. David Eastmond from the University of California at Riverside.

If you missed the seminars, or just want to review the materials again, you are invited to view/download the speaker presentations by visiting DTSC's European Chemicals Policy (REACH) webpage at <http://www.dtsc.ca.gov/PollutionPrevention/REACH.cfm>.

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DTSC Pharmaceuticals Symposium

May 22, 2007 - Tuesday
10:00 am - 3:30 pm
Cal/EPA Building
1001 I Street
Sacramento, California

Save this date!! DTSC is sponsoring a free, one-day pharmaceuticals symposium on May 22 in Sacramento. Titled "Pharmaceuticals and Personal Care Products (PPCPs) in the Environment", the symposium will open an important dialogue about PPCPs, addressing questions such as:

- **What are PPCPs and what is known about detection of these compounds in the environment?
- **What is the fate of organic wastewater contaminants from PPCPs in natural and engineered systems?
- **What are the potential health and environmental impacts associated with PPCPs? and
- **What are the perspectives of regulatory agencies such as U.S. EPA, academic researchers, the pharmaceutical industry, and the water industry on this issue?

DTSC will open registration for this symposium soon. For more information and updates on this upcoming symposium, please periodically check the DTSC Pharmaceutical Waste webpage at <http://www.dtsc.ca.gov/HazardousWaste/Pharmaceutical.cfm>, or call Tracy Taras at (916) 255-6632.

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**Free Workshop on Solvent Alternatives for Lithographic Printing**

March 7, 2007 - Wednesday  
8:00 am - noon  
Milton Marks Conference Center  
455 Golden Gate Avenue, Lower Level  
San Francisco, California

The Alameda County Green Business Program, City and County of San Francisco, DTSC, and several other agencies and organizations are sponsoring a FREE half-day workshop to promote the use of safer cleanup solvents in lithographic printing. The cleanup products currently used in lithographic printing often contain solvents that can be hazardous to workers, the community, and the environment. This workshop will provide information on the environmental and health

impacts that can occur from use of hazardous solvents and discuss safer alternatives for toxic cleanup solvents.

Anyone working in the lithographic printing industry, cleanup solvent manufacturing, green business programs, or environmental and worker health and safety will especially benefit from this workshop. It is free and open to anyone with an interest in safer lithographic cleanup solvent alternatives.

For more information on the workshop, please contact Pamela Evans, Alameda County Green Business Program, at [Pamela.evans@acgov.org](mailto:Pamela.evans@acgov.org), or (510) 567-6770; or Virginia St. Jean, San Francisco Department of Public Health, at [virginia.stjean@sfdph.org](mailto:virginia.stjean@sfdph.org), or (415) 252-3907.

To register for the workshop, please contact Patrice Sutton, UC Berkeley School of Public Health, at [psutton@phi.org](mailto:psutton@phi.org), or (415) 407-0259.

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DTSC Nanotechnology Symposium - Onsite Registration Closes February 23rd

March 8, 2007 - Thursday
9:00 am - 12:40 pm; check-in starts at 8:00 am
Cal/EPA Building, Byron Sher Auditorium
1001 I Street
Sacramento, California 95814

Don't forget to sign-up for this FREE symposium! It's open to the public...and you don't need a background in science or physics to benefit from this informative symposium. Topics to be discussed include: What is nanotechnology? How is nanotechnology used in California? What are the potential health and environmental impacts of nanotechnology? and more!

You can register for the symposium electronically, via FAX, or by mail. Registration is required for on-site attendance, and closes February 23rd (or earlier if room capacity is reached). The symposium will also be webcast, for those unable to attend in person.

For the symposium agenda and brochure, and information on how to register, please visit the DTSC website at <http://www.dtsc.ca.gov/TechnologyDevelopment/Nanotechnology.cfm>, or call Sharon Kipp at (916) 324-2998.

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### **Free Webcast Seminar - Using Nanotechnology to Improve Health Care in Developing Countries**

February 27, 2007 - Tuesday  
9:00 am - 11:00 am (Pacific Time)

The Woodrow Wilson Center in Washington D.C. invites you to view a live webcast seminar titled "Using Nanotechnology to Improve Health Care in Developing Countries." The seminar is co-sponsored by the Center's Project on Emerging Nanotechnologies and the Global Health Initiative, and will discuss the exciting potential applications of nanotechnology in medicine and public health. Consider this...what if public health workers in Bangladesh could place contaminated water into transparent bottles, which when placed in direct sunlight could disinfect the water and help prevent water-borne diseases like cholera, dysentery or polio? Can nanotechnology potentially make this a reality?

Seminar topics include: How is nanotechnology expected to transform medicine and health care in the future? What are the risks involved in its implementation? And what are the challenges of ensuring that nanotechnology meets the specific health needs of Third World peoples? A discussion period will follow the presentations.

For a list of speakers and more information on the seminar and webcast, please visit the Woodrow Wilson Center's website at [www.wilsoncenter.org/nano](http://www.wilsoncenter.org/nano) (no RSVP required to view webcast).

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DTSC's Metal Finishing Model Shop Program - Call for Northern Cal Business and Local Agency Participants

Did you know that DTSC has a voluntary program designed to help metal finishing businesses (including metal platers, anodizers, and printed circuit board manufacturers) run cleaner and safer shops? The Metal Finishing Model Shop (MFMS) program promotes multi-media pollution prevention practices at shops through compliance assistance, P2 technical assistance, and training. Businesses that successfully complete the program receive Model Shop certification and recognition for their efforts.

The program began in Southern California and is now being expanded to Northern California. Also included in the expanded program is a small business loan program for purchase of equipment that would help eligible businesses meet or exceed environmental requirements.

So please spread the word on the newly expanded MFMS program! The program's success statewide really depends on participation from both businesses and local environmental agency staff. If you know of any Northern California businesses that would be good candidates for the program (such as past environmental award recipients or those maintaining good compliance histories); or if you work for a Northern California local environmental agency and would like to help review shops and provide pollution prevention assistance, please contact Natalie Marcano, Northern California MFMS Program coordinator, at (510) 540-3943 or nmarcani@dtsc.ca.gov.

Or if you would like to refer a business or participate in the program in Southern California, please contact Evelina Rayas at (818) 551-2936 or erayas@dtsc.ca.gov.

Thanks for your help!

For more information about the MFMS program, please visit the DTSC website at:
http://www.dtsc.ca.gov/PollutionPrevention/index.cfm#Metal_Finishing_Model_Shop_Program.

More information about the California Small Business Loan Guarantee Program can be found at:
<http://www.bth.ca.gov/programsinitiatives/sblgp.asp>.

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**USEPA Environmental Awards Program - Nominations Due February 16, 2007**

The U.S. Environmental Protection Agency (USEPA) is encouraging citizens in California, Arizona, Nevada, Hawaii, and the Pacific Islands to nominate a friend, peer, or organization for this year's USEPA Environmental Awards program. The program, now in its ninth year, recognizes individuals and groups outside of USEPA who made significant contributions to improve the environment in the year 2006. Anyone can be nominated...scientists, teachers, journalists, citizen activists, young people, organizations, business representatives, public officials...anyone committed to protecting public health and preserving our natural surroundings.

Entries will be judged on the following criteria:

- \* Promotion of innovative ideas, techniques, and/or technologies.
- \* Ability to address an environmental problem or need.
- \* Accomplishment of stated goals.
- \* Ability of the program/activity to be replicated or widely shared.
- \* Collaboration with others.
- \* Clarity and effectiveness of the presentation.
- \* Long term benefits for the environment.

Nomination forms must be submitted online no later than February 16, 2007. A panel from USEPA will review all of the applications and select this year's finalists, who will be notified by mid-March. Winners will then be recognized at a ceremony to be held in San Francisco mid-April.

For more information and to submit a nomination form online, visit:

<http://www.epa.gov/region09/awards>. For questions regarding the program, please call the Environmental Information Center at (866) EPA-WEST, or Wendy Chavez at (415) 947-4248.

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Training Opportunities from REBRAC

****REGIONAL ENVIRONMENTAL BUSINESS RESOURCE ASSISTANCE CENTERS (REBRAC)****

The following classes are being offered by the LA/Orange Counties REBRAC in conjunction with North Orange County Community College District, DTSC, and the local Certified Unified Program Agencies (CUPAs). For more information, or to register, please contact Perla Fickenscher at (714) 808-4620, or Taffy Kennedy at (714) 808-4613. The classes are both being held at 1830 W. Romneya Drive, Anaheim, California 92801.

PCB WASTE MANAGEMENT IN CALIFORNIA

This course will address the PCB waste and PCB-contaminated equipment that is subject to California and federal regulations. Course will include graphics and photos from regulatory PCB site visits and inspections, and photos of typical PCB wastestreams. Course instructor is Nabil Yacoub (from DTSC's Cypress Office).

Cost: Free!!!

Date: Thursday, February 15, 2007

Time: 12:00 noon - 1:00 pm

MANAGING WASTE AEROSOL CANS AND WASTE FLUORESCENT LAMPS IN CALIFORNIA

Course topics include: when are aerosol cans and fluorescent lamps considered wastes; what is considered to be an empty aerosol can; management of non-empty aerosol cans; management of fluorescent lamps; and alternatives. Course instructor is Nabil Yacoub.

Cost: Free!!!

Date: Thursday, February 22, 2007

Time: 11:00 am - 1:00 pm

HAZARDOUS WASTE MANAGEMENT IN CALIFORNIA - 3 HOUR REFRESHER

Course topics include: waste identification; hazardous waste generator standards; container and tank standards; preparedness, prevention and training plans; transportation; onsite treatment; recycling in California; universal waste rule standards; pollution prevention; and best environmental practices. Course instructor is Nabil Yacoub.

Cost: \$40 per person

Date: Wednesday, March 14, 2007

Time: 9:00 am - noon

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